ABSTRACT:

The invention relates to a speech recognition system and a method of calculating iteration values for free parameters $\lambda_\alpha^{ortho(n)}$ of a maximum-entropy speech model MESM with the aid of the generalized-iterative scaling training algorithm in a computer-supported speech recognition system in accordance with the formula

$\lambda_\alpha^{ortho(n+1)} = G(\lambda_\alpha^{ortho(n)}, m_\alpha^{ortho}, \ldots)$, where n is an iteration parameter, G a mathematical function, α an attribute in the MESM and m_α^{ortho} a desired orthogonalized boundary value in the MESM for the attribute α. It is an object of the invention to further develop the system and method so that they make a fast computation of the free parameters λ possible without a change of the original training object. According to the invention this object is achieved in that the desired orthogonalized boundary value m_α^{ortho} is calculated by a linear combination of the desired boundary value m_α with desired boundary values m_β from attributes β that have a larger range than the attribute α. m_α and m_β are then desired boundary values of the original training object.